

## **Sustaining Family Forests in Rural Landscapes: Rationale, Challenges, and an Illustration from Oregon, USA**

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Family forests are critical components of rural landscapes, societies and economies. In Oregon, where nonindustrial private forests comprise only 16% of the forestland base, the ecological, social and economic impact of this ownership category is disproportionately large. This is due to the landscape position these lands occupy, the diversification they contribute to forest cover and local economies, and the political and cultural connections they provide to urban populations. The significance of this ownership category is even greater in the United States as a whole, where nonindustrial private forests comprise nearly two-thirds of the commercial forestland base, dominating rural landscapes in many regions of the country. Despite the important role family forests play, their ability to contribute to the wellbeing of rural areas is challenged by several dynamic factors, including industrial consolidation in global wood markets, loss of family forestland to corporate ownership, and parcelization and fragmentation of family forestland at the urban fringe. Moreover, family forestry does not enjoy a strong social contract with the American public, which is largely ignorant of the existence of this ownership class. A foundation of broad social approval and appreciation for family forestry is prerequisite to development of policies which can sustain family forestland ownerships and the contributions they make. This paper draws from recent research in Oregon to argue that, whereas most research on nonindustrial private forests has focused on economics and management at the individual producer level, these challenges demand greater attention to the role of family forests in the wider context of landscape, culture and rural economy.

### **INTRODUCTION**

Family forestlands are disappearing from the rural landscapes of America. The forces responsible for this shift are multiple and interrelated, and the consequences are profound. This paper (1) describes some of the major forces placing family forests at risk, (2) describes the unique ecological, economic, and social contributions made by family forests to the rural landscape, and to the nation as a whole, and (3) argues that building a stronger social contract between family forest owners and society at large is essential to sustaining family forests and the benefits they provide.

While the following observations are confined to the United States, and focus especially on the state of Oregon, they may hold some relevance for private forests elsewhere, since forest owners around the world are increasingly participating in the same markets, reacting to the same information and feeling the same competitive pressures. It is the purpose of this paper to engender thought and discussion about whether the sustainability of family forests as an ownership category should be of concern, and if it is, what might be done about it.

In the United States, the stakes are huge. About one-third of the total land area (or 298 M ha) is forested (Birch 1996). Of this, about 159 M ha are held by private owners. Corporate owners such as banks, real estate companies, pension funds, and, most recently, timber investment management organizations (TIMOs) hold 27% of the private forestland. Another 14% is held by partnerships, estates, clubs, associations and Indian tribes. Most of the private forestland (58%, 93 M ha) is owned by almost 10 M individuals and families. The term 'family forest' is being used in some quarters to highlight the distinctive characteristics of ownerships for which personal and family values are strong management motivators, and to increase awareness of the unique contributions these lands make to society.

Two fundamental, evolutionary shifts are occurring, affecting the sustainability of family forestlands. The first involves changes in the structure and pattern of private forestland ownership. The second involves changes in social values as the United States has evolved from a rural, to an urban, to a suburban culture.

## **CHANGING FORESTLAND TENURE PATTERNS**

### **Parcelisation and Fragmentation**

At the fringes of every urban center across America, family forests are being subdivided to serve their 'highest and best use' as residential mini-nature preserves for the wealthy, subdivisions for the middle class, retirement destinations for the aging, and shopping malls for everyone. In the Southeast, uncontrolled suburban sprawl is converting thousands of hectares of productive forestland into concentric circles of shopping malls, townhouses, faux antebellum mansions, and congested commuter beltways surrounding every metropolitan area. The US Forest Service has estimated that almost 4.9 M ha of forestland in the Southeastern USA were lost to urban development between 1982 and 1997 (Forestry Source 2002a). Forest Service researchers anticipate the region could lose an additional 7.7 M ha by 2040, most of it nonindustrial private forestland.

In the Pacific Northwest, the temperate rainforests that drew so many to Seattle are now being felled to accommodate the burgeoning population. Even in Oregon, the state which leads the nation in land use planning and zoning, as much as one third of the nonindustrial private forestland in the Coast Range could surrender to urban growth over the next 50 years, despite laws enacted to prevent such a loss (Johnson 2002).

The consequences of this parcelization are many and familiar: forest fragmentation and the resultant habitat destruction, loss in management options and the concomitant decline in timber productivity, and increased social conflict as rural and urban lifestyles collide (Egan and Luloff 2000, Sampson and DeCoster 2000).

### **Consolidation and Corporatization**

Farther from town, in the major timber-growing regions of the country, family forests are being gobbled up by mega-multinational corporations so as to serve more efficiently the insatiable appetites of consumers and investors around the globe. Family forests make attractive additions to adjacent corporate timberlands, especially where they can be converted profitably to intensively managed tree farms. Over the past decade in Western Oregon alone, on average about 8,000 ha have moved out of nonindustrial private forestland ownership every year, most moving into forest industry ownership (Zheng and Alig 1999).

But the largest industrial forestry players are undergoing their own sea-change in forestland ownership. Many companies, in pursuit of ever higher returns to shareholders, have spun off their timberland holdings in order to concentrate on their core wood processing businesses. Timber Investment Management Organizations (TIMOs), which acquire and manage timberlands for investors, now constitute the fastest-growing forestland ownership category in America. The Pinchot Institute predicted that 5-6 M ha of timberland will move out of industrial ownership during this decade, with much of this area moving into TIMO ownership (Block and Sample 2001). As TIMOs consolidate their land base they, too, seek to acquire adjacent family forestlands.

These developments not only result in a direct loss of family forestland but also make it increasingly difficult for the remaining family forests to compete and survive. Gone are the days when farmers sold timber to the neighborhood sawmill to be processed into lumber for local consumption. The local mill, if it still exists, is a small part of a conglomerate that has owners in far off places who answer to distant shareholders. The family forest owner is in direct competition with corporate owners that dominate the marketplace, determining which products are in demand, and at what price. In the Pacific Northwest, forest industry's shift to growing shorter rotation, smaller diameter Douglas fir has nearly eliminated the market for large, high quality logs. Mills capable of processing large logs are now scarce. Family forest owners that have for decades nurtured stands of older, large Douglas fir now find themselves without markets in which to sell. These market realities will force many owners to abandon their current management strategies and adopt industry's short-rotation plantation model.

Some professional foresters may take comfort in the conversion of family forestlands to corporate ownership. After all, one of the profession's more popular pastimes has been NIPF-bashing. Their very moniker – '*non-industrial*' – defines family forest owners by what they are not. For decades, despite ample evidence to the contrary, the dominant professional forestry view of NIPFs has been that they are a problem one of poor management, low productivity and unpredictable behavior. The profession's solution has been to try and make them more like industry. To convert them outright to industrial ownership solves that problem.

### **CHANGING SOCIAL VALUES**

In earlier times when the USA was in its infancy, most citizens lived on farms, grew much of their own food, and burned firewood from their own woodlots to heat their homes. Family farm size reflected the family-farm-based economy. Similarly,

family forests were sized appropriate to the existence of local markets and mills. They were large enough to provide for family needs and provide a surplus that could be marketed locally to supplement farm income. Society looked to rural America primarily as a source of food and fiber to feed, clothe and house the nation.

Today, some citizens still can recall visiting the farm of a grandparent, or cutting firewood in the old family forest, but the number of Americans with such memories is dwindling. As the 2000 U.S. census (U.S. Census Bureau 2000) demonstrates, America is now a suburban nation, with a majority of its population, and most of its political power, in the suburbs. Most Americans are not even rural-urban migrants – they have no personal memory of America's rural past, a past enshrined in the paintings of Norman Rockwell and central to the country's sense of identity.

Stauber (2001) writing in the *Economic Review* observed that the USA has evolved three distinct urban - rural social contracts. A social contract is a largely unwritten set of rules, behavioral norms, and values that collectively describes society's expectations regarding a particular sector. The urban-rural social contract describes what society at large expects from rural places, and what such places can expect from society. It outlines rights and responsibilities, and the limits of acceptable behavior.

From 1500 to the 1700s, America was entirely rural. Then, until the late 1800s, Americans looked to the frontier as a source of cultural symbols, notably the rugged individualism personified by frontiersmen and pioneer women, as well as a source of raw materials. Americans invested in the frontier through exploration, military protection, and support for commercial growth at the frontier. Rural America had become more of a storehouse by the late 1800s as the frontier was tamed. Urbanites looked to the countryside for the commodities needed to drive industrialization and feed the growing urban population. They paid for the production of these commodities through direct subsidies, development of rural electric and telephone systems, construction of transportation and irrigation projects, and research and extension education programs.

Since the 1970s, Stauber argued, there has been no social contract between rural and urban America. Americans no longer look primarily to rural America for our food and fiber: these commodities can and do come from anywhere on the planet. Americans are bargain hunters shopping in a global market, and rural America is no longer a low-cost producer of food or fiber. As Stauber (2001, p. 43) put it, 'Rural America used to be America's storehouse – today the world is America's storehouse'

One result is that few citizens make the conceptual connection between the wood houses they live in, the paper that fills their mailbox, and the forests from which those products come. Many and perhaps most Americans are unaware that family forests even exist. If they ever think of forests, they likely picture either the 'untouched' wilderness of national parks, or the clearcut plantations of industrial forests. Being unaware of family forests, they cannot be expected to understand the valuable contributions these lands make to society, let alone the challenges involved in sustaining them. This lack of awareness is symptomatic of the weak social contract between society and forest owners, or, to put it another way, between those who consume and those who produce the nation's forest products, amenities and values. The challenge this weak social contract presents to the sustainability of

family forestlands is as daunting as the formidable challenges of competing in the global economy.

## WHAT HAS THE USA GOT TO LOSE?

The above discussion raises the obvious question, ‘What do family forestlands contribute to society?’ What does the USA stand to lose as this ownership category disappears? The familiar triad of economic, ecological and social functions is a convenient framework for summarizing the contributions of family forests to society.

### Potential Loss of Economic Resilience

Historically, nonindustrial private forests have been valued principally for their contribution to the nation’s wood supply. In fact, their importance in supplying wood has overshadowed and led the forestry profession to undervalue the huge contributions these forests make to the nation’s ecological and social wellbeing. Be that as it may, the economic importance of NIPFs should not be underestimated. They produce well over half of the nation’s annual timber harvest (Powell *et al.* 1993).

As timber harvesting has been curtailed on federal lands, forest products companies have had to look increasingly to their own lands and the lands of other private owners to keep their mills in wood. In Oregon, the amount of timber produced annually from non-industrial private forests is proportional to their land base. That is, they make up 17% of Oregon’s forestland, and they annually produce about 16% of all timber produced in the state (Oregon Department of Forestry 1995). Their annual production is about equal to the total annual timber production from all public forests, which comprise over 60% of the state’s forestland!

NIPF lands may provide some balance to the unpredictable, sudden swings currently being experienced by large forest industrial players. Forest industry was once seen as a steady and dependable owner of forest land, in the business for the long haul. NIPF owners, by contrast, were viewed as fickle, subject to the vagaries of the marketplace, and unreliable as long-term stewards. Today, however, mounting global competitive pressures are forcing large forest products companies to merge and takeover or be taken over. This is fueling unprecedented debt loads, with predictable consequences, including ever-shorter rotations, liquidation of standing timber assets, and conversion of timberland to real-estate development where such markets exist. Plum Creek, the nation’s second largest holder of private timberland, recently announced plans to ‘develop’ 3.2 M ha of its land throughout the USA, including 162,000 ha for urban fringe development (Forestry Source 2002b). Clearly, industrial timberland can no longer be considered forest in perpetuity.

### Potential Loss of Ecological Diversity

The ecological importance of family forests is profound. The forests of the East coast, Mid-west, and South are all dominated by private ownership, and especially nonindustrial private forests. Although public forests dominate western forests, the location of family forests gives them an importance way beyond the proportion of land area they occupy. As a result of early settlement patterns, family forests in the

West are prevalent at lower elevations and dominate riparian corridors. These ecologically significant lands host important habitat for northern spotted owls, marbled murrelets, and the salmon for which the Pacific Northwest is famous.

A recent examination of the relationships between forest ownership patterns and patterns of forest habitat diversity in the Coast Range (Stanfield *et al.* 2003) confirmed that the spatial arrangement of public, industrial and nonindustrial private forestlands has a large impact on the forest diversity present in any given watershed. Moreover, each ownership type contributes a different mix of forest conditions to the landscape. Nonindustrial private ownerships, for example, provide a mixture of young to medium aged conifer stands, extensive hardwood stands, and a high proportion of non-forest land (often abandoned farmland). This unique mixture contributes ecological diversity to landscapes otherwise dominated by the conifer plantations of industrial forestland, or the maturing stands of Douglas fir found on public forests in the region.

Family forestlands are also disproportionately dominant at the fringes of metropolitan areas, where the ecological services, open space, and aesthetic beauty they provide add immeasurably to the urban dwellers' quality of life.

### **Social Vitality Placed at Risk**

The unique economic and ecological values that family forests bring to the landscape derive from the human characteristics of family forest owners. The diversity of human aspirations, capabilities, values and knowledge drives the diversity in forest conditions observed among family forestlands. Family forest owners bring a human scale to the landscape, integrating elements of wildness and cultivation, protection and production, into management of their properties. They provide a link to the past by preserving special places, buildings and even individual trees that have some special historical or family significance (Bliss and Martin 1989, Bliss 1992).

Family forest owners are also members of rural communities, contributing to rural vitality at a time when many rural areas are undergoing out-migration and decline. About 40% of all private forest owners reside on their forestland (Birch 1996). Many are active members of rural communities: they have children in public schools, serve on school boards, participate in local churches, run local businesses, and serve on chambers of commerce.

Family forest owners help maintain a connection between society and the resources upon which all of the community are dependent – a connection of which most in society have lost sight. A large and growing percentage of family forest owners are suburbanites themselves. Many have one foot firmly planted in the culture of forest management, and the other in the mainstream suburban culture. Survey research indicates that they share the same core environmental values as the general American public (Bliss *et al.* 1997). These family forest owners could play a major role in raising public consciousness regarding forestry.

### **TOWARD A NEW SOCIAL CONTRACT FOR FAMILY FORESTRY**

Thus far two arguments have been presented. First, the very existence of family forests is imperiled. The structure of forest ownership, the distribution of family

forests across the landscape, and the relationship between society and forests are all undergoing profound changes. Global economic forces are inexorably driving changes in land tenure patterns and the structure of wood markets. Demographic changes will continue to shape the nature of the American people, their culture, consumption patterns and values. The divide between suburban consumers and rural producers is likely to continue to grow.

Second, family forests make major economic, ecological and social contributions, many of which are unique to this ownership category. A future in which the country's forests are divided between public forest reserves and industrial tree farms is an impoverished future.

The final argument to be made in this essay is this: the American people take family forests for granted at their peril. If family forests are to be sustained, they must be valued by society. Sustaining family forests in rural landscapes requires building a strong social contract for family forestry. Stauber (2001) observed that America no longer has a social contract with its rural citizens. The same might be said of forestry in general, including family forestry. Society's forest values are completely out of synch with consumption patterns: the dominant professed community value is one of preservation, while the actual behaviour is unbridled consumption. The average size of new wood houses in the USA continues to grow even as average family size shrinks. To feed the insatiable demand for wood, the USA increasingly turns to the rest of the world, even as domestic national forests are placed off limits for timber harvest.

On an emotional level, we Americans have yet to make the connections between the forest products we love to consume, the forests we enjoy, and the processes involved in sustainably producing the one from the other. We love wood products but hate cutting trees. Among those citizens who are aware of private forest ownership, ambivalence – or at best grudging acceptance – of forest management are common attitudes. Add to this bleak emotional context the lack of a coherent, articulated national policy for family forestlands, and a growing, complicated and inconsistent tangle of local, state and national rules and regulations. The result is an environment that discourages investment in long-term stewardship of family forestland.

If these are symptoms of a nonexistent or weak social contract, what would a robust social contract for family forestry imply? First, the value of family forests to society would be widely recognized and appreciated. Society's expectations for family forests would be clearly articulated, and they would be in realistic alignment with consumption patterns, forest conditions, and the economic and practical realities of forest management. A judicious balance of regulations, incentives and education would inform forest owners' management decisions.

While global economic and social change is inevitable, the demise of family forests need not be. Surviving the profound changes already in motion will require a strong social contract for family forestry. Engaging society in conversation about the roles of family forests in the landscape is a necessary first step toward forging that contract.

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